ABSTRACT

PROCESSING GRAPHIC OBJECTS FOR FAST RASTERISED RENDERING

Disclosed are methods, apparatus (1) and computer readable media for rendering at least one graphic object (80, 90) described by at least one edge (82-86, 92-98) into a raster pixel image (78) having a plurality of scan lines and a plurality of pixel locations on each scan line. For each scan line, coordinates of intersection of those edges of the objects that intersect the scan line are determined in a predetermined order. This is preferably achieved by processing edge records (418) using a number of buffers (402, 404,406, 412,420, 422) thereby enabling efficient sorting of edge intersections into order. For each adjacent pair of edge intersections, information (530) associated with the corresponding object is examined to determining a set of active objects (508, 510) for a span of pixel locations between the corresponding pair of edge intersections. For each span of pixel locations, the corresponding set of active objects is used to determine (600) a value for each of the locations within the span. The information may include one or more of a fill count, a clip count and other factors. A compositing model accommodating opacity is also disclosed, as are stack operations used to facilitate rendering and other features which contribute to fast processing of image components.

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